IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for control of an automatic transmission of a vehicle provided with an engine that drives the transmission, comprising:

detecting a downhill-travel situation of the vehicle via an electronic unit when a slope on which the vehicle is traveling is greater than a predetermined threshold slope, a power demand of the engine is smaller than a predetermined power threshold, and braking via a brake pedal is absent;

when the electronic unit detects the downhill-travel situation, storing a longitudinal speed at a beginning of the downhill-travel situation in a memory;

during the downhill-travel situation, comparing a current speed of the vehicle with the speed at the beginning of the downhill-travel situation; and

based on the comparing, choosing a transmission ratio such that the engine absorbs energy, comprising instructing the transmission to initiate downshifting if the current speed exceeds the speed at the beginning of the downhill-travel situation by an excess speed that is above a predetermined deviation such that the downshifting is initiated only if the excess speed is due to an incapacity of the engine to hold the vehicle below the excess speed,

wherein when the braking is applied via the brake pedal, the downhill-travel situation is not detected.

2. (Canceled)

3. (Previously Presented) A control method according to claim 1, further comprising:

verifying that, before the downshifting is initiated, an energy-absorption capacity of the engine is smaller than the predetermined power threshold.

4. (Previously Presented) A control method according to claim 3, wherein the energy-absorption capacity of the engine is determined by an engine speed.

5. (Previously Presented) A control method according to claim 3, wherein the predetermined power threshold is an increasing function of the slope on which the vehicle is traveling.

6. (Previously Presented) A control method according to claim 1, wherein the deviation from the speed at the beginning of the downhill-travel situation is between 5 and 10 km/h.

7. (Previously Presented) A control method according to claim 1, wherein the vehicle is equipped with a speed-governing system.

8. (Currently Amended) A system for control of an automatic transmission of a vehicle provided with an engine that drives the transmission, comprising:

an electronic unit configured to:

identify a downhill-travel situation of the vehicle when a slope on which the vehicle is traveling is greater than a predetermined threshold slope, a power demand of the engine is smaller than a predetermined power threshold, and braking via a brake pedal is absent,

when the electronic unit identifies the down-hill travel situation, measure and store in a memory a longitudinal speed at a beginning of the downhill-travel situation, compare a current speed of the vehicle with the speed at the beginning of the

downhill-travel situation, and

instruct the transmission to initiate downshifting if the current speed exceeds

the speed at the beginning of the downhill-travel situation by <u>an excess speed that is</u>

<u>above</u> a predetermined deviation <u>such that the downshifting is initiated only if the</u>

<u>excess speed is due to an incapacity of the engine to hold the vehicle below the excess</u>

<u>speed,</u>

wherein the electronic unit does not identify the downhill-travel situation if the

braking is applied via the brake pedal.

9. (Currently Amended) A vehicle, comprising:

an engine;

an automatic transmission driven by the engine; and

[[the]] <u>a</u> system ~~according to claim 8~~ to control the automatic transmission<u>, the system</u>

<u>comprising an electronic unit configured to:</u>

<u>identify a downhill-travel situation of the vehicle when a slope on which the</u>

<u>vehicle is traveling is greater than a predetermined threshold slope, a power demand</u>

<u>of the engine is smaller than a predetermined power threshold, and braking via a</u>

<u>brake pedal is absent,</u>

<u>when the electronic unit identifies the down-hill travel situation, measure and</u>

<u>store in a memory a longitudinal speed at a beginning of the downhill-travel situation,</u>

<u>compare a current speed of the vehicle with the speed at the beginning of the</u>

<u>downhill-travel situation, and</u>

<u>instruct the transmission to initiate downshifting if the current speed exceeds</u>

<u>the speed at the beginning of the downhill-travel situation by an excess speed that is</u>

<u>above a predetermined deviation such that the downshifting is initiated only if the</u>

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excess speed is due to an incapacity of the engine to hold the vehicle below the excess

speed,

wherein the electronic unit does not identify the downhill-travel situation if the

braking is applied via the brake pedal.

10. (Previously Presented) A control method according to claim 1, wherein the

downhill-travel situation is not detected if an accelerator pedal is depressed such that the

power demand of the engine is larger than the predetermined power threshold.

11. (Previously Presented) A system according to claim 8, wherein the electronic

unit is configured to verify that, before the downshifting is initiated, an energy-absorption

capacity of the engine is smaller than the predetermined power threshold.

12. (Previously Presented) A system according to claim 11, wherein the energy-

absorption capacity of the engine is determined by an engine speed.

13. (Previously Presented) A system according to claim 12, further comprising:

an engine controller configured to measure the engine speed.

14. (Previously Presented) A system according to claim 11, wherein the

predetermined power threshold is an increasing function of the slope on which the vehicle is

traveling.

15. (Previously Presented) A system according to claim 8, wherein the electronic unit does not detect the downhill-travel situation if the power demand of the engine from an accelerator pedal being depressed is larger than the predetermined power threshold.